Missouri School Health Profiles 1994 – 2002

Missouri Department of Elementary and Secondary Education
D. Kent King, Commissioner of Education

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Contents

Summary

Health education and policies in Missouri's public schools have improved since the first School Health Education Profile was conducted in 1994. Schools are requiring more health classes and are teaching more of the knowledge and skills students need to make healthy choices. Many schools have implemented basic policies to support student health and safety, to support continuing professional development for health teachers, and to involve communities in school health programs. However, some areas of concern remain.

Significant improvements

Positive changes documented as statistically significant by the 2002 survey include:

- An increase in the percentage of schools with a policy that protects the rights of HIV-positive students and staff
- An increase in teaching the analysis of media messages
- An increase in the percentage of schools that require health education in ninth grade
- An increase in the percentage of schools in which a district health curriculum coordinator coordinates health education

Areas of concern

- Some schools still do not require any health education in grades six through nine.
- Almost half of the schools still allow physical activity to be used as punishment in p.e. class.
- Only 69 percent of schools have a policy protecting the rights of HIV-positive students and staff.
- Although over half of secondary school principals say their schools have active health advisory counsels, only 27 percent of lead health teachers report working with food services staff.

Other important findings from the survey include:

- There is a trend toward requiring more than one health education class.
- Teachers want more continuing education than they receive.
- The teaching of health-enhancing skills remains high.
- Health education is integrated into many other subjects.

Recommendations

Recommendations based on the findings of the 2002 Missouri School Health Profile include:

- Every school should require at least one health course in one of grades 6 – 9.
- Schools should review their curricula, being cognizant of the fact that developmentally appropriate HIV/AIDS prevention education is required at every grade level by the Missouri School Improvement Program.[1]
- Schools that do not have a written communicable disease policy should adopt one.
- Schools should make sure that their communicable disease policies include protection of the rights of HIV-positive students and staff. The Department's *Policy Guidance on Communicable Diseases*[2] can be found in Appendix B of this publication and in Appendix D.1 of the *Manual for School Health Programs.*[3]
- Schools should prohibit the use of physical activity as punishment in p.e. class.
- Schools should increase support for health education in-service training, which is essential in a field that changes so rapidly.
- Schools should actively solicit broader representation and participation on health advisory councils. A health advisory council based on the coordinated school health model would ensure that all relevant areas within the school, as well as parents, the local health department, students, and religious organizations would be involved in the health education program.[4]

Introduction

The School Health Profile is a survey designed to monitor the status of health education and policies in public schools, including education to prevent HIV infection and other important health problems, at the middle, junior, and senior high school levels. The survey is conducted in the spring of even-numbered years as a requirement for a cooperative agreement between the Missouri Department of Elementary and Secondary Education and the federal Centers for Disease Control and Prevention (CDC). The survey was first administered in 1994.

Survey methods

During the spring of 2002, questionnaires prepared by the CDC Division of Adolescent and School Health were sent to the principal and a designated lead health education teacher in 419 secondary schools in the state. Systemic equal probability sampling with a random start was used to select schools from all regular secondary public schools having at least one of the grades 6 through 12. Usable questionnaires were received from 354 principals and 351 teachers.

The results from the questionnaires were weighted to permit generalization from the samples of 334 or 335 to the larger population of principals and lead health education teachers of schools with any of grades 6 through 12 in Missouri in the spring of 2002. The responses are representative of secondary principals and health education teachers in Missouri public schools and results may be used to develop policies and improve programs for school health education.

Survey results were compiled in the following categories: (1) overall results for all schools, (2) middle school results for schools comprised primarily of grades 6 – 8, (3) junior/senior high schools results for schools comprised primarily of grades 7 – 12, and (4) senior high school results for schools comprised primarily of grades 9 – 12. Not all data are reported in this publication. Key findings representing significant changes from the 2000 survey are reported and discussed.

Change between 1994 and 2002 in percentage of lead health education teachers who taught injury prevention:
+16

Change between 1995 and 2003 in percentage of high school students who wore a seat belt when they rode in a car driven by someone else:[5]
+15

Acknowledgements

The Missouri Department of Elementary and Secondary Education extends sincere appreciation to Bill Datema and Janet Wilson for administering the previous surveys. Because of their efforts, sufficient data have been collected for results to be representative of all schools in Missouri and to build a foundation for the long-term monitoring of trends in health education in Missouri's public schools. Thanks is also extended to the Centers for Disease Control and Prevention's Division of Adolescent and School Health and to Westat, Inc. for the expertise and support they provided with data collection, analysis, and reporting.

Table 1. School support for health education, Missouri, 1994 – 2002

years	*1994*	*1996*	*1998*	*2000*	*2002*
	Percentage of schools				
Require health education in any of grades 6 through 12	NA	84	80	87	92
Have written policy protecting rights of students and staff with HIV/AIDS	NA	78	72	55	69
Have designated coordinator of health education	71	90	97	98	97
District administrator	NA	6	3	11	13
District curriculum coordinator	21	6	18	17	27
School administrator	NA	20	25	21	15
School curriculum coordinator	18	1	6	NA	NA
Health education teacher	NA	34	31	41	35
Other	16	18	4	4	7
Have school health advisory council	46	41	37	54	55

NA—Not Available

Figure 1. Percentage of secondary schools receiving income from soft drink sales, Missouri, 2002

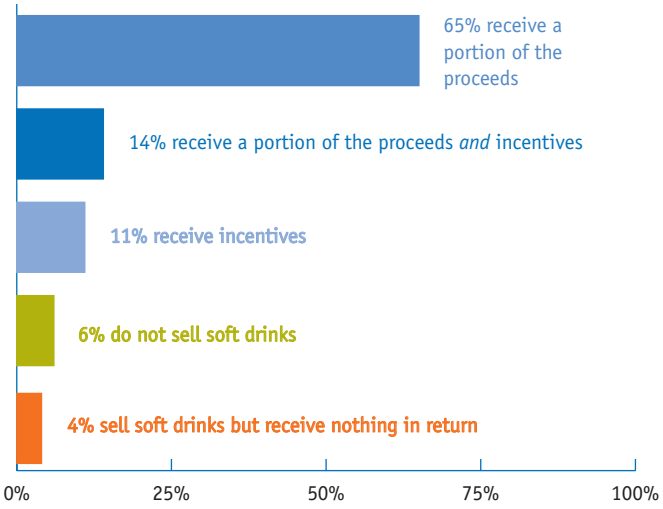


Table 2. School support for physical activity, Missouri, 2002

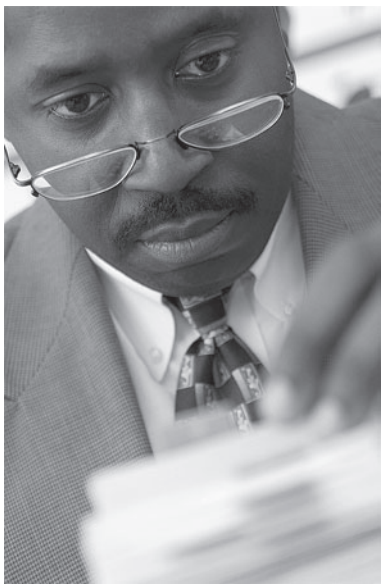
	Percentage of schools
Require physical education in any of grades 6 through 12	100
Permit youth to use school for community-sponsored sports teams or physical activity programs	93
Offer intramural activities or physical activity clubs	60
Allow faculty to use physical activity, such as laps or push-ups, to punish students for bad behavior in physical education	49
Provide transportation home for students who participate in after-school intramural activities or physical activity clubs	20
Allow faculty to make students miss physical education as punishment for bad behavior in another class	11

Table 3. Nutrition policies in secondary schools, Missouri, 2002

	Percentage of schools
Snack foods or beverages available from vending machines or snack bar	90
bottled water	86
100% fruit juice	79
salty snacks such as potato chips	77
low-fat salty snacks, such as pretzels	74
chocolate candy	70
other candy	70
low-fat baked goods	57
fruits or vegetables	30
Students can purchase snack foods or beverages	
during school lunch periods	72
before classes begin in the morning	72
during any school hours when meals are not being served	36
Students have at least 20 minutes for lunch after they are seated	63

School support for student health and safety

School administrators affect students' health through policies that promote health and physical education in a healthy school environment, that provide adequate training for teachers, and that build support through community involvement in shaping policies and curricula.



Health education

School administrators are responsible for ensuring that their schools meet minimum state requirements. The Missouri Department of Elementary and Secondary Education requires health education in all public schools, including, specifically, AIDS prevention education at every grade level.[1] Eight percent of the schools report not meeting this requirement (Table 1).

Physical education

All schools require physical education and most provide students the opportunity to participate in physical activities outside of the regular school day (Table 2). Unfortunately, 49 percent of schools still allow physical activity to be used as punishment in p.e. class, which risks creating negative associations with physical activity in students' minds.[6] (Table 2).

Nutrition

Administrators face the challenge of reconciling some school policies and activities—such as the sale of soft drinks—with good nutrition for students. Schools' nutrition policies should reinforce nutrition education and complement school food services programs,[7] but most schools have some policies that undermine efforts to promote healthy eating (Figure 1, Table 3).

Violence prevention

Most schools have a violence response plan, but only 52 percent have peer mediation programs, and only 40 percent have a program that addresses bullying (Table 4).

Table 4. Violence prevention programs in secondary schools, Missouri, 2000 – 2002

	Percentage of schools	
years	***2000***	***2002***
Violence response plan	96	98
Peer mediation	49	52
Bullying prevention	38	40
Gang violence prevention	25	21
Safe-passage to school	10	8

Health services

The Missouri School Improvement Plan requires public schools to implement a health services plan,[1] which is usually the responsibility of the school nurse. Although 28 of the 525 districts do not meet this requirement,[8] Missouri's ratio of 1 school nurse to 593 students is better than the 1-to-750 ratio recommended by the National Association of School Nurses.[9] As the number of students with chronic problems such as asthma increases, school health services become more important than ever. Table 5 shows the extent of asthma management activities in secondary schools.

The Missouri School Improvement Program requires the adoption of a written policy on communicable diseases, and such a policy should protect the rights of students or staff with HIV infection or AIDS. The percentage of schools with a written policy protecting the rights of students or staff with HIV infection or AIDS rose after declining in 2000. (Table 1). In contrast, 100 percent of schools have a written policy prohibiting student cigarette smoking in school buildings (Table 2).

Table 5. Asthma management activities in secondary schools, Missouri, 2002

	Percentage of schools
Encourage full participation in physical education and physical activity when students with asthma are doing well	97
Provide modified physical education and physical activities as indicated by the student's Asthma Action Plan	95
Identify and track all students with asthma	93
Assure immediate access to medications as prescribed by a physician and approved by parents	91
Provide a full-time registered nurse, all day every day	72
Obtain and use an Asthma Action Plan for all students with asthma	64
Educate school staff about asthma	60
Educate students with asthma about asthma management	56
Provide intensive case management for students with asthma who are absent 10 or more days per year	38
Teach asthma awareness to all students in at least one grade	32

Professional preparation

The degree to which a professional trained in health education coordinates a program is one measure of effective health education.[10] Almost all schools have a designated health education coordinator (Table 1).

Continuing education is another indicator of the quality of school health education.[4,11–13] The percentage of lead health education teachers able to attend professional development activities has shown a fairly steady increase since 1994 (Figure 2).

Advisory councils

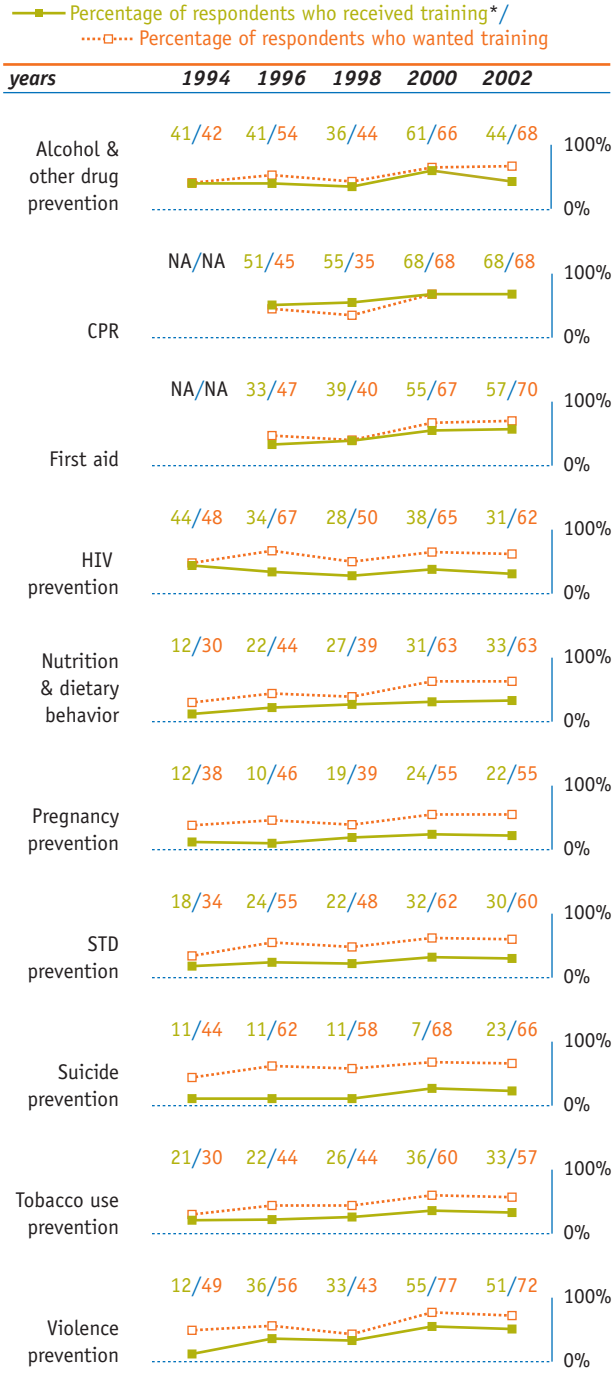
School health advisory councils not only elicit supportive attitudes from the community about health education, they also facilitate access to community resources.[4,13–16] The percentage of schools with a health education advisory council reached its highest level ever, but is still only 55 percent (Table 1).

Table 6. Tobacco control policies in secondary schools, Missouri, 2000 – 2002

years	*2000*	*2002*
	Percentage of schools	
Prohibit student cigarette smoking		
in buildings	100	100
on grounds	99	99
in buses	100	99
at off-campus, school-sponsored events	96	97
Prohibit student use of		
smokeless tobacco	93	98
cigars	90	97
pipes	89	97
Prohibit tobacco advertising		
in buildings	94	93
on grounds	94	92
in buses	94	93
in school publications	93	92
Prohibit students from wearing tobacco brand-name clothing or carrying merchandise with tobacco company names, logos, or cartoon characters	92	93
Prohibit tobacco advertising through sponsorship of school events	89	90
Prohibit faculty and staff use of		
cigarettes	75	83
smokeless tobacco	70	82
cigars	70	82
pipes	70	81
Prohibit visitor use of		
cigarettes	NA	81
smokeless tobacco	NA	75
cigars	NA	79
pipes	NA	79

NA—Not Available

Figure 2. Topics on which lead health education teachers wanted and received in-service training, Missouri, 1994 – 2002



NA—Not Available *In preceding two years

Teacher preparation

Effective health education is linked to teacher training and is aided by the use of teachers who have health education as a primary responsibility.[10,11,13] Certification as a health educator typically requires specific training in college and continuing education. Participation in continuing education may indicate the school's level of support for health education.

The major academic preparation of lead health education teachers in Missouri is most frequently health and physical education followed by physical education only (Table 7). Fifty-six percent have been teaching health for more than five years (87 percent in 1994, 61 percent in 1996, 56 percent in 1998, 58 percent in 2000). The percentage of teachers receiving in-service training has risen over six years, but opportunities for professional development have never kept pace with need (Figure 1).

Table 7. Major emphasis of professional preparation of lead health education teachers, Missouri, 1994 – 2002

years	*1994*	*1996*	*1998*	*2000*	*2002*
	Percentage of respondents				
Health and physical education	NA	40	42	50	47
Physical education only	62	31	22	18	25
Family life education or life skills	15	14	14	NA	14
Other	6	3	3	3	6
Health education only	6	2	3	3	3
Science	6	4	5	4	3
Nursing	4	2	5	2	2
Counseling	2	0	1	1	0

NA—Not Available

Change between 1994 and 2002 in percentage of lead health education teachers who taught tobacco prevention: +8

Change between 1994 and 2002 in percentage of lead health education teachers who taught drug prevention: +3

Change between 1995 and 2003 in percentage of high school students who regularly smoked cigarettes: [5]
-15

Change between 1995 and 2003 in percentage of high school students who regularly used marijuana: [5]
0

Table 8. Grades in which health education is required, Missouri, 1994 – 2002

years	1994	1996	1998	2000	2002
	Percentage of schools				
7th	52	76	78	83	86
8th	51	59	74	78	86
9th	27	49	61	68	86
6th	31	56	64	63	74
10th	30	56	60	36	25
11th	9	24	32	16	17
12th	8	22	31	16	15

Table 9. Number of separate health education courses required in grades 6 – 12, Missouri, 1994 – 2002

years	1994	1996	1998	2000	2002
	Percentage of schools				
1 course	50	44	48	40	42
2 courses	10	22	23	23	24
3 courses	4	13	15	22	19
4 courses	2	1	3	7	9
None	33	18	10	8	6

Table 10. Skills taught in required health education courses in secondary schools, Missouri, 1994 – 2002

years	1994	1996	1998	2000	2002
	Percentage of schools				
Resisting peer pressure	NA	97	95	98	98
Decision making	NA	98	96	99	97
Goal setting	NA	89	91	95	94
Stress management	NA	88	87	95	92
Communication	NA	87	88	93	93
Assessing health information, products, and services	NA	NA	81	85	90
Conflict resolution	NA	79	81	89	90
Advocating for personal, family, and community health	NA	NA	78	85	85
Analysis of media messages	NA	75	76	76	85

NA—Not Available

Table 11. Topics taught in required health education courses in secondary schools, Missouri, 1994 – 2002

years	1994	1996	1998	2000	2002
	Percentage of schools				
Nutrition and dietary behavior	79	98	93	95	100
Physical activity and fitness	79	98	94	95	100
Alcohol or other drug use prevention	96	100	99	100	99
Tobacco use prevention	91	97	99	99	99
HIV prevention	86	94	93	96	96
Accident or injury prevention	78	89	87	95	94
Emotional and mental health	NA	91	90	95	94
Growth and development	NA	90	89	93	92
STD prevention	78	94	91	90	90
Consumer health	NA	85	80	85	88
First aid	NA	88	82	86	86
Human sexuality	78	90	84	84	84
Violence prevention	40	85	85	82	85
Pregnancy prevention	66	85	84	82	82
Environmental health	NA	75	71	71	78
Dental and oral health	NA	78	71	75	77
Suicide prevention	57	75	70	73	74
CPR	NA	75	69	71	73
Death and dying	NA	59	55	58	62

NA—Not Available

Table 12. HIV and AIDS topics taught in required health education courses in secondary schools, Missouri, 1994 – 2002

years	1994	1996	1998	2000	2002
	Percentage of schools				
How HIV is and is not transmitted	NA	100	94	95	94
How HIV affects the human body	NA	NA	NA	94	92
Abstinence as the most effective way to avoid HIV	74	96	92	94	93
Influence of alcohol/drugs on HIV infection risk behaviors	68	91	87	89	83
Social or cultural influences on HIV-related risk behaviors	41	84	77	83	83
The number of young people who get HIV	NA	NA	NA	85	80
Information on HIV testing and counseling	36	77	68	79	78
Compassion and support for persons with HIV/AIDS	33	77	67	81	76
Condom efficacy	52	75	66	66	68
Correct use of condoms	20	41	30	28	28

NA—Not Available

Instruction

Amount of instruction

Although students' knowledge can be improved with approximately 10 hours of instruction, acquiring the skills needed to practice healthy behaviors requires approximately 40 to 50 hours of instruction each year for several consecutive school years.[11,12,17,18] Since 1994 this survey has documented an encouraging trend toward requiring health classes in consecutive years (Tables 8, 9).

Research indicates that providing only factual information about health-related topics does not influence student behavior.[19] A high percentage of teachers again reported teaching a variety of skills in health education courses (Table 10). Schools are to be commended for continuing to teach skills that prepare students to make responsible decisions about their health.

Methods of instruction

Research also indicates that involving students in decisions about programs and in presenting positive messages to their peers is an effective instructional tool.[19] Peer educators may address attitudes and model behaviors in a manner that is more acceptable to students. The percentage of schools that report using trained peer educators to teach about health has more than doubled (28 percent in 1998, 61 percent in 2002).

Table 13. Tobacco prevention topics taught in required health education courses in secondary schools, Missouri, 2000 – 2002

years	*2000*	*2002*
	Percentage of schools	
Short- and long-term health consequences of cigarette smoking	98	97
Benefits of not smoking cigarettes	99	96
Short- and long-term health consequences of smokeless tobacco	98	95
Addictive effects of nicotine in tobacco products	99	95
The number of illnesses and deaths related to tobacco use	95	94
How to say no to tobacco use	NA	94
The health effects of second-hand smoke	NA	94
Influence of the media on tobacco use	95	92
Social or cultural influences on tobacco use	90	92
Benefits of not using smokeless tobacco	96	91
Influence of families on tobacco use	93	91
How many young people use tobacco	92	90
Risks of cigar or pipe smoking	90	89
How students can influence or support others to prevent tobacco use	89	88
How students can influence or support others in efforts to quit using tobacco	87	88
Making a personal commitment not to use tobacco	70	73
How to find valid information or services related to prevention or cessation of tobacco use	72	67

NA—Not Available

Content of instruction

The percentage of lead health education teachers who teach about HIV infection and AIDS as part of a required health education course in any of grades 6 through 12 remained high (Table 11). The amount of basic HIV/AIDS education, as well as such prevention topics as sexual behaviors that transmit HIV, condom use, and reasons for choosing sexual abstinence, remained near the levels of 2000 (Table 12). Generally, schools taught about nutrition, tobacco prevention and physical activity more than HIV prevention topics.[20,21] (Tables 12 – 15).

Change between 1994 and 2002 in percentage of lead health education teachers who taught abstinence:
+19
Change between 1994 and 2002 in percentage of lead health education teachers who taught correct condom use:
+8
Change between 1995 and 2003 in percentage of high school students who had ever had sex: [5]
-2
Change between 1995 and 2003 in percentage of sexually active high school students who used a condom the last time they had sex: [5]
+15
Change between 1995 and 2003 in percentage of high school students who had ever been or gotten someone pregnant: [5]
-4

Table 14. Nutrition and dietary topics taught in required health education courses in secondary schools, Missouri, 2002

	Percentage of schools
The benefits of healthy eating	98
The Food Guide Pyramid	98
Using food labels	96
Aiming for a healthy weight	96
Choosing a variety of fruits and vegetables daily	95
Eating disorders	95
Risks of unhealthy weight control practices	94
Choosing a diet low in saturated fat and cholesterol and moderate in total fat	94
Moderating intake of sugars	94
Choosing a variety of grains daily, especially whole grains	93
The Dietary Guidelines for Americans	91
Preparing healthy meals and snacks	90
Accepting body size differences	90
Eating more calcium-rich foods	88
Keeping food safe to eat	84
Choosing and preparing foods with less salt	83

Table 15. Physical activity topics taught in required health education courses in secondary schools, Missouri, 2002

	Percentage of schools
The physical, psychological, or social benefits of physical activity	96
Health-related fitness	93
Phases of a workout	91
Decreasing sedentary activities such as television watching	90
Weather-related safety	90
Dangers of using performance-enhancing drugs, such as steroids	90
Preventing injury during physical activity	89
How much physical activity is enough	88
Opportunities for physical activity in the community	80
Developing an individualized physical activity plan	75
Overcoming barriers to physical activity	74
Monitoring progress toward reaching goals in an individualized physical activity plan	72

Change between 1994 and 2002 in percentage of lead health education teachers who taught nutrition:
+21
Change between 1995 and 2003 in percentage of high school students who ate five or more servings of fruits and vegetables per day: [5]
-8

Coordination of school health activities

The involvement of parents is necessary for successful health education.[4,13 – 15] What is taught at school must be reinforced outside of the classroom if healthy behaviors are to be promoted and risky behaviors prevented. In addition, parents and communities are more supportive of health education if they know what is being taught and have the opportunity to influence what is taught.

The percentage of schools that involved their communities in health education with health advisory councils was about the same as in 2000 (Table 1). The effectiveness of health education can be enhanced if health teachers work cooperatively with other teachers and with other school staff who influence school health.[4] Health teachers report working most closely with physical education teachers and least with food service staff (Table 16).

A substantial minority of schools infuse health into other curricular areas, a practice that cannot replace required health education, but can reinforce and extend it.[4,13] (Table 17).

Table 16. Strategies used by lead health teachers to involve others in health education, Missouri, 1994 – 2002

years	*1994*	*1996*	*1998*	*2000*	*2002*
	Percentage of schools				
Invited parents to attend health education class	19	33	31	30	30
Provides families with information on the health education program	NA	NA	NA	66	73
Met with parents' organization, such as PTA, to discuss the health education program	NA	NA	NA	18	21
Collaborated with other school health personnel					
Physical education staff	NA	NA	NA	NA	88
School health services staff	NA	NA	NA	NA	82
School mental health or social services staff	NA	NA	NA	NA	59
Community members	NA	NA	NA	NA	50
Food service staff	NA	NA	NA	NA	27

NA—Not Available

Table 17. Secondary school courses other than health in which required HIV prevention and tobacco prevention are taught, Missouri, 2002

	HIV prevention	*Tobacco prevention*
	Percentage of schools	
Physical education	40	57
Home economics or family and consumer education	50	49
Family life education or life skills	45	46
Science	39	35
Special education	21	27

Appendix A

Missouri School Improvement Standards on Health Education and Communicable Diseases

Resource Standards[1]

Elementary School

1.1.1. Each elementary student will receive regular instruction in reading, language arts, mathematics, science, social studies, comprehensive health (including tobacco, alcohol and other drug prevention and HIV/AIDS prevention education) and career awareness education.

Junior High/Middle School

1.2.2. Physical education is scheduled and taught to all students for a minimum of 3,000 minutes each year and health (including tobacco, alcohol and other drug abuse prevention education and HIV/AIDS prevention education) and safety education is scheduled and taught to all students for a minimum of 1,500 minutes each year.

High School

1.3 Each high school has a current minimum offering of at least 40.5 units of credit, with sufficient sections in each course to meet the needs of all students in grades 9 – 12 and the state high school graduation requirements. These courses are distributed as follows:

	MINIMUM STANDARD	DESIRABLE STANDARD
Health (Includes tobacco, alcohol and other drug prevention and HIV/AIDS prevention education)	0.5	1.0

Process Standards[1]

8.11 The district has developed and implemented a program for school health services which includes goals and objectives, service activities, and an evaluation design.

1. The district has a written health services plan and health care services which include:

- goals and measurable objectives aligned with the CSIP and student performance data
- program evaluation criteria and procedures
- board-approved written policies on the administration of medication, contagious and infectious diseases, immunizations for school children, confidentiality of health records, and child-abuse reporting
- procedures for first aid and emergency care (including accident-reporting procedures and records of students served)
- procedures for maintaining up-to-date cumulative health records including immunization records and emergency contact information
- procedures for providing comprehensive health screenings, making referrals for identified health problems, and sharing information with parents/guardians
- procedures for monitoring students' chronic health problems and for developing strategies for addressing such problems to ensure individual students' academic progress

2. The health services plan and program is reviewed by a registered nurse and/or a consulting physician annually.

3. Program improvement strategies have been identified and implemented.

Appendix B

Policy Guidance on Communicable Diseases[3]

The continuing expansion of medical knowledge about communicable diseases and expanding statutory and case law on the rights of individuals who may have the diseases make it imperative that local boards of education routinely review their policies and procedures for dealing with communicable diseases to be sure they are both legal and effective.

The State Board of Education periodically reviews and updates its policy guidance on communicable diseases and distributes the revised documents to public schools. The policy guidance was last revised in September 1990. It consists of two parts: Communicable Disease-Student and Communicable Disease-Employee. Throughout the document, reference is made to Infection Control Procedures for Schools. These guidelines, published by the Missouri Department of Health, are attached to this document.

The State Board of Education recommends that all local boards of education review their policies and procedures and make adjustments where necessary.

This policy guidance was approved by the Missouri State Board of Education in October 1987 and revised in October 1988, June 1989, September 1990 and November 1995.

Communicable Disease – Student

Purpose

The School Board recognizes its responsibility to protect the health of students and employees from the risks posed by infectious diseases. The Board also has the responsibility to uphold the rights of affected individuals to privacy and confidentiality, to attend school and to be treated in a nondiscriminatory manner.

Immunization

Students cannot enroll and/or attend school unless immunized as required by Missouri law.

Universal Precautions

The district requires all staff to routinely observe universal precautions to prevent exposure to disease-causing organisms, and the district should provide necessary equipment/supplies to implement universal precautions (see Appendix C).

Categories of Potential Risk

Students with infectious diseases that can be transmissible in school and/or athletic settings (such as, but not limited to, chicken pox, influenza and conjunctivitis) should be managed as specified in: (a) the most current edition of the Missouri Department of Health document entitled: *Prevention and Control of Communicable Diseases: A Guide for School Administrators, Nurses, Teachers, and Day Care Operators* and (b) documents referenced in 19 CSR 20-20.030 and (c) in accordance with any specific guidelines/recommendations or requirements promulgated by the local county or city health department.

A student infected with a bloodborne pathogen such as hepatitis B virus (HBV), hepatitis C virus (HCV), or human immunodeficiency virus (HIV) poses no risk of transmission through casual contact to other persons in a school setting. Students infected with one of these viruses shall be allowed to attend school without any restrictions which are based solely on the infection. The district cannot require any medical evaluations or tests for such diseases.

> Exceptional Situations: There are certain specific types of behaviors (for example, biting or scratching) or conditions (for example, frequent bleeding episodes or uncoverable, oozing skin lesions) which could potentially be associated with transmission of both bloodborne, and non-bloodborne pathogens. No student, regardless of whether he or she is known to be infected with such pathogens, should be allowed to attend school unless these behaviors or conditions are either absent or appropriately controlled in a way that avoids unnecessary exposure.

In these exceptional instances, an alternative educational setting may be warranted. In certain instances, a designated school administrator may want to convene a Review Committee. The number of persons on the Review Committee should be limited. It is recommended that members be limited to: 1) the parent(s)/guardian(s), 2) medical personnel (student's physician, school nurse) 3) building administrator, 4) superintendent and/or designee. Local health department officials may be consulted and/or included as members of the review team. If the student is identified as having a disability, any change of placement would need to be effected through the Individualized Education Program (IEP) process. In the case of a student who is disabled, but not identified under the Individuals with Disabilities Education Act, any change of placement would need to be effected through a multidisciplinary team meeting.

Specific mechanisms should be in place to ensure the following are consistently done:

a. All episodes of biting, and all children who exhibit repeated instances of significant aggressive behavior, should be reported to the designated school administrator.

b. The school nurse, and the designated school administrator when appropriate, should be informed of any child who has recurrent episodes of bleeding or who has uncoverable, oozing skin lesions.

c. The school nurse, and the designated school administrator, when appropriate, should be promptly informed of any child with an illness characterized by a rash.

d. The school nurse and designated school administrator shall be informed promptly of any instance in which the significant potential for disease transmission occurs.

Confidentiality
The superintendent or designee shall ensure that student confidentiality rights are strictly observed in accordance with law. Missouri law (§191.689 RSMo. (1994)) identified two groups of people within a school system who could be informed of the identity of a student with HIV infection on a "need to know" basis. They are:

1. Those designated by the school district to determine the fitness of an individual to attend school (see recommended Review Committee membership listed above); and

2. Those who have a reasonable need to know the identity of the child in order to provide proper health care.

Examples of people who need to know are: school nurse, review team members, and IEP team if applicable. Security of medical records will be maintained. Breach of confidentiality may result in disciplinary action, a civil suit, and/or violation of the Family Educational Rights and Privacy Act.

Education – Student
All students should receive age-appropriate information about the prevention and control of communicable diseases, to include the use of universal precautions. Instruction should be incorporated within a comprehensive school health curriculum in grades K – 12 as stated in Missouri School Improvement Program Standards.

Reporting and Disease Outbreak Control
Reporting and disease outbreak control measures will be implemented in accordance with state and local laws and Department of Health rules governing the control of communicable and other diseases dangerous to public health, and any applicable rules promulgated by the appropriate county or city health department.

Notification
Superintendents who supply a copy of a board-approved policy that contains provisions substantially similar to this guideline to the Department of Health shall be entitled to confidential notice of the identity of any district child reported to the Department as HIV-infected and known to be enrolled in the district (whether in a public or private school). The parent or guardian is also required by law to provide such notice to the superintendent.

Review
Districts should periodically review their policies and procedures and make revisions when necessary.

Legal References
§167.191, 191.650 – .703 RSMo.

Americans with Disabilities Act (42 U.S.C. 12101 et seq.)

P.L. 94 – 142 Individuals with Disabilities Education Act of 1973 (20 U.S.C. 1400 et seq.)

P.L. 92 – 112, Section 504 of the Rehabilitation Act of 1973

19 CSR 20.20.010 – 20.20.060 and 20.28.010

Communicable Disease – Employee
Purpose
The School Board recognizes its responsibility to protect the health of students and employees from the risks posed by infectious diseases. The Board also has the responsibility to uphold the rights of affected individuals to privacy and confidentiality, to continue their employment, and to be treated in a nondiscriminatory manner.

Universal Precautions
The district requires all staff to routinely observe universal precautions to prevent exposure to disease-causing organisms, and the district should provide necessary equipment/supplies to implement universal precautions (see Appendix C).

Categories of Potential Risk
Employees with infectious diseases that can be transmissible in school and/or athletic settings (such as, but not limited to, chicken pox, influenza and conjunctivitis) should be managed as specified in: (a) the most current edition of the Missouri Department of Health document entitled: *Prevention and Control of Communicable Diseases: A Guide for School Administrators, Nurses, Teachers, and Day Care Operators* and (b) documents referenced in 19 CSR 20-20.030 and (c) in accordance with any specific guidelines/recommendations or requirements promulgated

by the local county or city health department. A medical release may be required of the employee in certain circumstances.

An employee infected with a bloodborne pathogen such as hepatitis B virus (HBV), hepatitis C virus (HCV), or human immunodeficiency virus (HIV) poses no risk of transmission through casual contact to other persons in a school setting. Employees infected with one of these viruses shall be allowed to continue work without any restrictions which are based solely on the infection.

> Exceptional Situations: There are certain specific conditions (for example, frequent bleeding episodes or uncoverable, oozing skin lesions) which could potentially be associated with transmission of both bloodborne, and non-bloodborne pathogens. No employee, regardless of whether he or she is known to be infected with such pathogens, should be allowed to continue work unless these conditions are either absent or appropriately controlled in a way that avoids unnecessary exposure.

Specific mechanisms should be in place to ensure the following are consistently done:

a. The school nurse, and the designated school administrator, when appropriate, should be informed of any staff member who has recurrent episodes of bleeding or who has uncoverable, oozing skin lesions.

b. The school nurse, and the designated school administrator, when appropriate, should be promptly informed of any employee with an illness characterized by a rash.

c. The school nurse and the designated school administrator shall be informed of any instance in which the significant potential for disease transmission occurs.

Confidentiality
The superintendent or designee shall ensure that an employee's confidentiality rights are strictly observed in accordance with law. Security of medical records will be maintained and such records will be kept separate from other personnel records. Breach of confidentiality may result in disciplinary action and/or civil suit.

Training – Employee
All employees should receive training annually on universal precautions and the Communicable Disease Policy.

Testing – Employee
Requiring medical evaluations or tests of employees will not normally be authorized under the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act. Schools may require post-offer, preemployment or annual physical examinations if the exam is job-related and if conducted on all employees or applicants for similar positions. Requiring medical evaluations or tests for infection with bloodborne pathogens is not allowed by law.

Reasonable Accommodations
Districts should develop procedures to respond to employee requests for reasonable accommodations when an employee has a disability as defined by Section 504 and/or the ADA.

Reporting and Disease Outbreak Control
Reporting and disease outbreak control measures will be implemented in accordance with state and local laws and Department of Health rules governing the control of communicable and other diseases dangerous to public health, and any applicable rules promulgated by the appropriate county or city health department.

Review
Districts should periodically review their policies and procedures and make revisions when necessary.

Legal References
§167.191, 191.650 – .703 RSMo.

Americans with Disabilities Act (42 U.S.C. 12101 et seq.)

P.L. 93 – 112, Section 504 of the Rehabilitation Act of 1973

19 CSR 20.20.010 – 20.20.060 and 20.28.010

Appendix C

Infection Control Procedures for Schools[4]

General Procedures For Preventing Transmission of Infectious Diseases in School Settings

Having direct contact with the body fluids of another person can potentially provide the means by which many different infectious diseases can spread. Some examples of body fluids which can transmit infection, and some of the diseases that can result, are the following:

Body Fluid	Diseases Spread Through Contact With This Body Fluid
Eye discharge	Conjunctivitis (Pink Eye)
Nose or throat discharge	Colds, Influenza
Blood	Hepatitis B, HIV disease
Feces	Hepatitis A, shigellosis, giardiasis
Urine	Cytomegalovirus infection

It is important to remember that any person could potentially have disease-causing organisms in their body fluids, even if they have no signs or symptoms of illness. Consequently, the following recommendations should be followed in all situations, and not just those involving an individual known to have an infectious disease.

In the school setting, it is recommended that reasonable steps be taken to prevent individuals from having direct skin or mucous membrane* contact with any moist body fluid from another person. Specifically, direct contact should be avoided with all of the following:

1. blood (preventing exposure to blood or blood-contaminated body fluids is discussed in more detail in the following section on universal precautions)
2. all other body fluids, secretions, and excretions regardless of whether or not they contain visible blood
3. nonintact skin (any area where the skin surface is not intact, such as moist skin sores, ulcers, or open cuts in the skin)
4. mucous membranes

If hands or other skin surfaces are contaminated with body fluids from another person, washing with soap and water should take place as soon as possible.

In general, standard medical vinyl or latex gloves should be worn whenever the possibility of direct contact with any body fluid from another person is anticipated. Gloves should be available and easily accessible in any setting where contact with body fluids could take place. Hands should always be washed immediately after removal of gloves. Pocket masks or other devices for mouth-to-mouth resuscitation should be available.

Additional steps to reduce the risk of transmission of communicable diseases in the school setting include the following:

1. Toilet tissue, liquid soap dispensers, and disposable towels should always be available in all restrooms. All children should be taught proper handwashing and encouraged to practice this after using the restroom.
2. All children should wash their hands, with direct supervision as necessary, before eating.
3. Children should be discouraged from sharing food, personal grooming items, and cosmetics.
4. Younger children should be discouraged from placing other's fingers in their mouths or their own fingers in the mouths of others, and from mouthing objects that others might use.
5. Proper sanitation procedures must be followed with regard to food handling and preparation, control of insects and rodents, and proper disposal of solid waste.

Universal Precautions

The strategy of universal precautions was developed in the mid-1980s as a means of preventing the transmission of bloodborne pathogens such as human immunodeficiency virus (HIV) and hepatitis B virus (HBV). Although universal precautions were initially designed for use in hospitals and clinics, they are applicable to any workplace setting, including schools, where exposure to blood or blood-contaminated materials could potentially occur.

*Mucous membranes cover the eyes and the inside of the nose and mouth, along with certain other parts of the body. In a school setting, avoiding mucous membrane contact with body fluids means, for practical purposes, that one does not get these fluids in one's eyes, nose, or mouth. This can generally be accomplished by not rubbing the eyes with one's hands, and not putting the hands or anything touched by unwashed hands (such as food) in one's mouth. Good handwashing is vital to preventing mucous membrane exposure to disease-causing organisms.

Universal precautions apply only to blood, body fluids which are visibly contaminated with blood, and certain other body fluids such as semen, vaginal secretions, amniotic fluid, and cerebrospinal fluid. These precautions are designed specifically to prevent direct skin or mucous membrane exposure to these particular fluids, as well as to prevent accidents involving sharp instruments (such as needles) contaminated with these fluids. The term "universal" indicates that these precautions should be taken at all times and in all situations.

Universal precautions involve the following measures:

1. Appropriate barrier precautions should be used to avoid skin or mucous membrane contact with any of the above-mentioned body fluids. Such barrier precautions can, based on the given situation, include the use of standard medical vinyl or latex gloves along with gowns, protective eyeware, and/or masks. If potential contact with a significant amount of blood is anticipated, latex gloves are preferred. These items should always be available and readily accessible.
2. Hands and other skin surfaces should be washed immediately and thoroughly if contaminated. Hands should always be washed immediately after gloves are removed.
3. If any of the above-mentioned body fluids come into contact with the mucous membrane surfaces of the nose or mouth, the area should be vigorously flushed with water. If the mucous membrane surfaces of the eyes are contaminated, there should be irrigation with clean water, or with saline solution or sterile irrigants designed for this purpose.
4. Precautions should be taken to avoid injuries with sharp instruments contaminated with blood. Needles should not be recapped, purposely bent or broken by hand, removed from disposable syringes, or otherwise manipulated by hand. After they are used, disposable syringes and needles, and other sharp items, should be placed in puncture-resistant, leak-proof containers for disposal; the puncture-resistant containers should be located as close as practical to the use area.
5. Persons providing health care who have exudative skin lesions or weeping dermatitis should refrain from all direct patient care, and from handling patient-care equipment, until the condition resolves.

Persons who, as part of their assigned occupational duties, may reasonably be expected to have contact with blood should be vaccinated with hepatitis B vaccine. Vaccination of all school staff is neither feasible nor necessary. However, certain staff are assigned duties which could place them at increased risk of infection with hepatitis B. These individuals should be provided, free of charge, three doses of hepatitis B vaccine. Such individuals include:

1. the person(s) assigned primary responsibility for providing first aid
2. special education/early childhood development personnel who have contact with hepatitis B-infected children. These children may have special behavioral and/or medical problems which increase the likelihood of hepatitis B transmission
3. the person(s) assigned primary responsibility for cleaning up body fluid spills

A person who has been offered hepatitis B vaccine but refuses to receive it should be required to sign a statement indicating the vaccine was offered but he/she chose not to be vaccinated.

The Occupational Safety and Health Administration (OSHA) bloodborne pathogens rule 29 CFR Part 1910.1030 does not apply to public schools or other public institutions in Missouri. However, this rule establishes the current standard of practice with regard to the prevention of transmission of infectious bloodborne agents in occupational settings, and it contains good public health and risk management policies. School administrators and other school personnel who are involved in making health policy decisions should become familiar with this rule and consider, in consultation with appropriate legal counsel, adopting the policies which it describes, including the development of an exposure control plan. Such an exposure control plan should contain a statement on providing hepatitis B vaccine to appropriate school staff.

School nurses (RNs and LPNs) licensed under Chapter 335, RSMo, are required, according to 191.694, RSMo, to adhere to universal precautions, including the appropriate use of hand washing, protective barriers, and care in the use and disposal of needles and other sharp instruments.

Body fluids which are not associated with transmission of bloodborne pathogens, such as tears, nasal secretions, saliva, urine, and feces, are not covered by universal precautions. However, since these body fluids can transmit other diseases, the recommendations in the preceding section, which state that direct contact with these materials is to be avoided, should be followed at all times. Put another way, the use of universal precautions does not eliminate the need to utilize good infection control practices, including careful attention to hand washing, in all situa-

tions, regardless of whether there is risk of exposure to blood.

Procedures for Cleaning Spills of Blood or Other Body Fluids
1.Absorbent floor-sweeping material should be used to cover larger body fluid spills.

2. Wear sturdy, non-permeable gloves and other protective clothing as necessary

3. Use disposable absorbent towels or tissues, along with soap and water, to clean the area of the spill as thoroughly as possible.

4. All surfaces that have been in contact with the body fluids should then be wiped with a disinfectant. Any EPA-approved tuberculocidal disinfectant can be used. A 1:10 dilution of household bleach can also be used (this solution should not be mixed in advance because it loses its potency). After the disinfectant is applied, the surface should either be allowed to air dry, or else to remain wet for 10 minutes before being dried with a disposable towel or tissue.

5. If the gloves worn to clean up the spill are reusable rubber gloves, they should be washed with soap and running water prior to removal. Disposable gloves should be placed in an impermeable plastic bag. Regardless of the type of gloves used, care should be taken during glove removal to avoid contamination of the hands. However, whether or not any known contamination occurs, the hands should always be thoroughly washed with soap and water after the gloves are removed.

6. If the person doing the cleanup has any open skin lesions, precautions should be taken to avoid direct exposure of the lesions to the body fluids.

7. If direct skin exposure to body fluids accidentally occurs, the exposed area should be thoroughly washed with soap and water for at least 15 seconds.

8. It is necessary to keep one or more cleanup kits on hand for blood/body fluid spills. The cleanup kit should consist of the following items:

- Absorbent floor-sweeping material
- Liquid soap
- Disinfectant
- Small buckets
- Rubber or plastic gloves
- Disposable towels or tissues
- Impermeable plastic bags

All of these materials should be kept together in one or more central locations so that they are easily accessible.

CAUTION: Diluted bleach disinfectant solution, if utilized, should not be used for any other purpose than the cleanup described above. Mixing this solution with certain other chemicals can produce a toxic gas. Also, any EPA-approved disinfectant that is used should be diluted according to manufacturer's instructions. It is not appropriate or necessary to add more disinfectant than the directions indicate. Doing so will make the disinfectant more toxic, and could result in skin or lung damage to those individuals using it.

Missouri Department of Health
October 1995

References

1. Missouri Department of Elementary and Secondary Education. 2001. *Missouri School Improvement Program Integrated Standards and Indicators Manual: Accreditation Standards for Public School Districts in Missouri.* Jefferson City: Missouri Department of Elementary and Secondary Education.

2. Missouri Department of Elementary and Secondary Education. 1995. *Policy Guidance on Communicable Diseases.* Jefferson City: Missouri Department of Elementary and Secondary Education.

3. Missouri Department of Elementary and Secondary Education. 2000. *Manual for School Health Programs.* Jefferson City: Missouri Department of Elementary and Secondary Education.

4. Allensworth D. 1993. Health education: state of the art. *Journal of School Health* 63, no. 10: 14 – 20.

5. Missouri Department of Elementary and Secondary Education. 2003. *Youth Risk Behavior Surveys, 1995 – 2003.* Jefferson City: Missouri Department of Elementary and Secondary Education.

6. Centers for Disease Control and Prevention. 1997. Guidelines for school and community programs to promote lifelong physical activity among young people. *Morbidity and Mortality Weekly Report* 46, no. RR-6: 1 – 36.

7. Centers for Disease Control and Prevention. 1996. Guidelines for school health programs to promote lifelong healthy eating. *Morbidity and Mortality Weekly Report* 45, no. RR-9:1 – 33.

8. Missouri Department of Health and Senior Services. 2003. Healthy Communities and Schools Unit. Jefferson City: Missouri Department of Health and Senior Services.

9. National Association of School Nurses. 1995. *Position statement: caseload assignments.* Castle Rock, Colorado: National Association of School Nurses.

10. National Commission on the Role of the School and the Community in Improving Adolescent Health. 1989. *Code Blue: Uniting for Healthier Youth.* Alexandria, VA: National Association of State Boards of Education.

11. Connell D, Turner R, Mason E. 1985. Summary of findings of the school health education evaluation: health promotion effectiveness, implementation, and costs. *Journal of School Health* 55, no. 8:316 – 321.

12. Collins J, Small M, Kann L, Pateman B, Gold R, Kolbe L. 1995. School health education (school health policies and programs study). *Journal of School Health* 65, no. 8:30 – 311.

13. Lohrmann DK, Wooley SF. 1998. Comprehensive school health education. In: Marx E, Wooley SF, eds. *Health Is Academic.* New York: Teachers College Press, 43 – 66.

14. Epstein JL. 1995. School/family/community partnerships. *Phi Delta Kappan* 76:701 – 712.

15. Kolbe L. 1993. An essential strategy to improve the health and education of Americans. *Preventive Medicine* 22:544 – 560.

16. Missouri Coordinated School Health Coalition. 2000. *School Health Advisory Council Guide.* Columbia, MO: University of Missouri Outreach and Extension.

17. Institute of Medicine. 1997. *Schools and Health: Our Nation's Investment.* Washington: National Academy Press.

18. National Association of State Boards of Education. 1996. *Someone at School has AIDS: A Comprehensive Guide to Education Policies Concerning HIV Infection.* Alexandria, VA: National Association of State Boards of Education.

19. Joint Committee on National Health Education Standards. 1995. *Achieving Health Literacy: An Investment in the Future.* Atlanta: American Cancer Society.

20. Kirby D, Short L, Collins J, Rugg D, Kolbe L, Howard M, Miller B, Sonenstein F, Zabin LS. 1994. School-based programs to reduce sexual risk behaviors: a review of effectiveness. *Public Health Reports* 109:339 – 360.

21. Centers for Disease Control and Prevention. 1994. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report* 43, no. RR-2:1 – 18.

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